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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,950	08/13/2004	Hui-Min Lai	22171-00020-US1	4949

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EXAMINER

PHAM, VAN T

ART UNIT	PAPER NUMBER
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2627

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/710,950	Applicant(s) LAI ET AL.	
	Examiner VAN T. PHAM	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 recites the limitation "the deviation of a focal point" in lines 3-4, and 6; "the magnitude" in lines 7-8. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "the deviation of a focal point" in lines 7-8, and 11-12; "the magnitude(s)" in lines 14. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "a switch for intermittently transmitting the second sledge driving signal to the sledge of the optical disk drive" which is missing a point for a switch to switch between the first sledge signal and the second signal like discloses in the specification. (Noted the rejection below based on the knowledge on the specification). Appropriate correction is required.

Claim Objections

2. Claim 8 is objected to because of the following informalities: claim 7, recites the limitation "the at least one...", the word "the", should be deleted from that limitation.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 5-8, 10-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Sheu at al. (US 6,717,892).

Regarding claim 1, Sheu discloses an error compensation method for an optical disk drive, comprising the steps of: detecting an error signal showing the deviation of a focal point from a track of the optical disk drive (see Fig. 5, element 78 and col. 4, line 54-col. 5, line 25)); generating a first sledge driving signal based on the error signal showing the deviation of the focal point (see Fig. 5, element 98, 100); generating a second sledge driving signal based on the magnitude of the error signal or the first sledge driving signal (see Fig. 5, elements 88, 98, 100, 70); and intermittently driving a sledge of the optical disk drive by the second sledge driving signal to perform error compensation (see col. 5 and Fig. 5).

Regarding claim 2, Sheu discloses the error compensation method for an optical disk drive in accordance with claim 1, further comprising the step of detecting error signals between an actuator and the sledge of the optical disk drive (see col. 5).

Regarding claim 3, Sheu discloses the error compensation method for an optical disk drive in accordance with claim 1, wherein the first and second sledge driving signals alternately drive the sledge of the optical disk drive for error compensation.

Regarding claim 5, Sheu discloses the error compensation method for an optical disk drive in accordance with claim 1, further comprising the step of filtering the error signal smaller than a preset threshold value (see Fig. 6).

Regarding claim 6, Sheu discloses the error compensation method for an optical disk drive in accordance with claim 1, wherein the magnitude of the second sledge driving signal is proportional to that of the error signal or the first sledge driving signal (see cols. 5-6 and Fig. 6).

Regarding claim 7, Sheu discloses the error compensation method for an optical disk drive in accordance with claim 1, further comprising the step of dividing the error signal or the first sledge driving signal into segments based on magnitude thereof, wherein the second sledge driving signal generated from the error signal or the first sledge driving signal in the same segment has the same voltage (see Fig. 6, and inherently).

Regarding claim 8, see rejection above of claim 1.

Regarding claim 11, Sheu discloses the error compensation apparatus for an optical disk drive in accordance with claim 8, wherein the error signal further comprises an error signal between an actuator and the sledge of the optical disk drive (see Fig. 5).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over sheu et al. (US 6,717,892) in view of Kawada et al. (6,603,717).

a. Claims 4 and 9:

Sheu discloses the error compensation method for an optical disk drive in accordance with claim 1, wherein the second sledge driving signal is employed to drive the sledge of the optical disk drive.

Kawada discloses a sledge driving signal is employed to drive a sledge of the optical disk drive when a clock signal is at high level (see Fig. 1, elements 11).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a sledge driving signal is employed to drive a sledge of the optical disk drive when a clock signal is at high level in Sheu as suggested by Kawada, the motivation being in order to control a signal representing a servo loop on signal (see Kawada col. 2).

Regarding claim 9, see rejection above of claim 4.

b. Claim 10:

Sheu discloses the error compensation apparatus for an optical disk drive in accordance with claim 8.

Kawada discloses a switch for intermittently transmitting a sledge-driving signal to the first sledge signal of the optical disk drive (see Fig. 1, circuit 9).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a switch in Sheu as suggested by Kawada, the motivation being in order to change-over (see Kawada col. 2).

Cited References

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

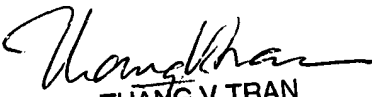
The cited references relate to a method for detecting the speed of a sledge motor in an optical storage device; a method for calibrating center error offset in an optical drive and control system capable of calibrating center error offset; and a method for detecting running speed of sledge motor in optical storage device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN T. PHAM whose telephone number is 571-272-7590. The examiner can normally be reached on Monday-Thursday from 9:00 am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP


THANG V. TRAN
PRIMARY EXAMINER